ADDRESSING
Mental Health
CONCERNS IN
PRIMARY CARE
A CLINICIAN'S TOOLKIT

## MENTAL HEALTH SCREENING AND ASSESSMENT TOOLS FOR PRIMARY CARE

The Mental Health Screening and Assessment Tools for Primary Care table provides a listing of mental health screening and assessment tools, summarizing their psychometric testing properties, cultural considerations, costs, and key references. It includes tools that are proprietary and those that are freely accessible. Products are listed for informational purposes only. Inclusion in this publication does not imply endorsement by the American Academy of Pediatrics.

Consideration for including screening tests in the table included the tests' reliability, validity, sensitivity, and specificity.

- Reliability is the ability of a measure to produce consistent results.
- The validity of a screening test is its ability to discriminate between a child with a problem and one without such a problem.
- Sensitivity is the accuracy of the test in identifying a problem.
- Specificity is the accuracy of the test in identifying individuals who do not have a problem.<sup>1</sup>

Sensitivity and specificity levels of 70% to 80% have been deemed acceptable for developmental screening tests<sup>2</sup>; these values are lower than generally accepted for medical screening tests.<sup>1</sup> Use of lower sensitivity and specificity values may identify children with symptoms

that do not rise to the level of a *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* diagnosis<sup>3</sup>; however, these children may benefit from interventions in the primary care setting or community to address their symptoms or functional difficulties. These children may also benefit from close monitoring of their emotional health by their families, pediatric health professionals, and teachers or caregivers.

The table is organized to follow the clinical process described algorithmically by the Task Force on Mental Health.4 Clinicians at various stages in integrating a mental health approach into their practice may want to review the entire table first, gain some experience with a few tools, and use quality improvement strategies such as small planning, doing, studying, acting (PDSA) cycles to refine their approach. Team meetings with the practice clinicians and collaborative office rounds involving primary care clinicians and mental health or developmental specialists, with the aim of discussing clinical cases and the use of specific tools, may focus the implementation process. As the clinician and groups of clinicians gain more comfort, they can further revise their approach. Engaging families by sending them an introductory letter to inform them of the practice's interest in their child's socio-emotional health, by directly asking their experience with the chosen tools, and by inviting them to be a part of a learning group may also facilitate adoption of a particular approach or tool.

The table is by no means exhaustive and the information is subject to change over time. Consideration was first given to tools that have strong psychometric properties and are appropriate for use in pediatric (ie, birth to 21 years) primary care settings. Those that are freely accessible are listed first. Proprietary tools are also listed if there is no equivalent tool in the public domain or if the tool is already well known to practitioners and has strong psychometric properties.

In addition to screening tools, the table includes tools that may be used for primary care assessment of children's global functioning and assessment of children presenting with the most common problems encountered in primary care—anxiety, depression, inattention and impulsivity, disruptive behavior or aggression, substance abuse, learning difficulties, and symptoms of social-emotional disturbance in young children. Also included are tools to identify risks in the psychosocial environment, prior exposure to trauma, and problems with the child's developmental trajectory and cognitive development.

| Psychosocial<br>Measure                     | Tools and<br>Description  | Number of Items<br>and Format   | Age Group                            | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties   | Cultural<br>Consideration <sup>a</sup>   | Cost and<br>Developer            |
|---|---|---|--------------------------------------|--|--|--|----------------------------------|
| Mental Health<br>Update and<br>Surveillance | Bright Futures<br>Surveillance Questions <sup>5</sup>   | Unlimited   | 0 to 21 y                            | Variable   | Open-ended questions that invite participatory care. No psychometric properties reported.  | Any language   | AAP/MCHB<br>Freely<br>accessible |
|   | Bright Futures Previsit<br>and Supplemental<br>Questionnaires   | Variable  | 0 to 21 y                            | Variable   | Yes/No questions that invite participatory care and help elicit areas for further couseling. No psychometric properties reported.              | English  | AAP/MCHB Freely accessible       |
|   | GAPS (Guidelines for Adolescent<br>Preventive Services)<br>Questionnaire <sup>6</sup>   | 72 items for younger adolescent;<br>61 items for older adolescent;<br>15 items for parent | Parent,<br>young teen,<br>older teen |  | NA   | English,<br>Spanish  | Freely<br>accessible             |
|   | HEADSSS <sup>7-9</sup> Home, Education/employment, Activities, Drugs, Sexuality, Suicide/depression, Safety   |   |                                      | Part of interview process  |  |  | Freely accessible                |
| Previsit Data Co                            | llection (Algorithm Step A2a):  | Screening for Mental Health and Su  | bstance Abuse                        | Problems in Children and A   | dolescents   |  |                                  |
| General<br>Psychosocial<br>Screening Tests  | PSC-17 <sup>b</sup> (Pediatric Sympton Checklist—<br>17 items) <sup>10–15</sup> General psychosocial screening and functuional assessment in the domains of attention, externalizing, and internalizing symptoms                    | 17 items  Self-administered  Parent or youth ≥11 y  | 4 to 16 y                            | <5 min<br>Scoring: 2 min   | Subscales have obtained reasonable agreement with validated and accepted parent-report instruments. Cronbach alpha was high for each subscale. | English,<br>Spanish,<br>Chinese<br>Reading level:<br>fifth to sixth<br>grades  | Freely<br>accessible             |
|   | PSC-35 <sup>b</sup> (Pediatric Symptom<br>Checklist—35 items) <sup>10–11,13–14</sup><br>General psychosocial screening<br>and functional assessment in<br>the domains of attention,<br>externalizing, and internalizing<br>symptoms | 35 items  Self-administered  Parent or youth ≥11 y  | 4 to 16 y                            | <5 min<br>Scoring: 1 to 2 min  | General psychosocial screen<br>Sensitivity: 80% to 95%<br>Specificity: 68% to 100%   | English,<br>Spanish,<br>Chinese,<br>Japanese<br>Pictorial version<br>available | Freely<br>accessible             |

SUPPLEMENT ARTICLE

| Psychosocial<br>Measure    | Tools and<br>Description  | Number of Items<br>and Format   | Age Group           | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties   | Cultural<br>Consideration <sup>a</sup>               | Cost and<br>Developer      |
|----------------------------|---|---|---------------------|--|--|--|----------------------------|
|                            | SDQb (Strengths and Difficulties Questionnaire) <sup>16–19</sup> General psychosocial screening for emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behavior (not included in score); a separate scale assesses impact of symptoms on global functioning. | 25 items  Self-administered Parent, teacher, or youth 11 to 17 y        | 3 to 17 y           | 10 min   | Reliable and valid in various populations and for a number of general mental health conditions Sensitivity: 63% to 94% Specificity: 88% to 98%   | >40 languages  | Freely<br>accessible       |
|                            | ASQ-SE <sup>b</sup> (Ages and Stages Questionnaire—Social Emotional) <sup>20</sup> Screens for social-emotional problems in young children.   | From 19 items (6 mo) to 33 items (30 mo)  Parent report                 | 6 to 60 mo          | 10 to 15 min  Scoring: 1 to 5 min (can be scored by paraprofessionals)               | Sensitivity: 71% to 85% Specificity: 90% to 98% To be used in conjunction with ASQ or other tool designed to provide information on a child's communicative, motor, problem- solving, and adaptive behaviors | English,<br>Spanish<br>Reading level:<br>sixth grade | Proprietary<br>(\$149/kit) |
| Substance Use              | CRAFFT (Car, Relax, Alone,<br>Forget, Friends, Trouble)<br>Lifetime Use <sup>b,21–23</sup><br>Screens for substance abuse.  | 3 screener questions, then 6 items<br>Self-administered or youth report | Adolescents         | 1 to 2 min   | Sensitivity: 76% to 92%<br>Specificity: 76% to 94%<br>PPV: 29% to 83%<br>NPV: 91% to 98%   | No cross-<br>cultural validity<br>data               | Freely accessible          |
| Surveillance of            | Environment for Risk Factors (  | Algorithm Step A2a)   | <u> </u>            |  |  | <del></del>  |                            |
| Parent/Family<br>Screening | Edinburgh Maternal Depression <sup>b,24-29</sup> Screens women for depression.  | 10 items Parent self-report   | Peripartum<br>women | <5 min to administer Scoring: 5 min  | Sensitivity: 86%<br>Specificity: 78%   | Has cross-<br>cultural validity                      | Freely accessible          |
|                            | Pediatric Intake Form (Family Psychosocial Screen) <sup>30</sup> Screens for parental depression, substance use, domestic violence, parental history of abuse, and social supports.   | 22 items  | 0 to 21 y           | Variable   | Not described  | English  | Freely<br>accessible       |

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|-------------------------|--|---|--|--|--|---|--|
|                         | PHQ-9 (Patient Health Questionnaire-9) <sup>31–33</sup> Screens adults for depression.   | 9 items Parent self-report  | Adult  | <5 min to administer  Scoring: <3 min  | Excellent internal reliability and test-retest reliability. Cutoff score of 10 or more Sensitivity: 88% for major depression Specificity: 88% for major depression | Not validated in<br>languages other<br>than English   | Freely<br>accessible   |
|                         | PHQ-2 <sup>b</sup> (first 2 items from PHQ-9) <sup>34,35</sup><br>Screens adults for depression.   | 2 items Parent self-report  | Adult  | 1 min  | Overall Sensitivity: 83% to 87% Specificity: 78% to 92% PPV: not available   | Not validated in languages other than English   | Freely<br>accessible   |
|                         | AAS (Abuse Assessment Screen) <sup>b,36</sup> Screens for domestic violence.   | 5 to 6 items Parent report  | Adolescent<br>and adult<br>women               | About 45 seconds if all answers are "No"   | Some studies indicate low sensitivity (<40%) and high specificity (>90%).  | Still in development  | Freely<br>accessible   |
|                         | McMaster General Functioning<br>Scale <sup>37–40</sup> Assesses family functioning.  | 12 items<br>Self-report   | Adolescents and adults                         | <5 min   | Temporally stable, good internal consistency, and concurrent and construct validity.   | Cross-cultural consideration. Translated into 24 languages.   | Proprietary<br>(\$41.95)   |
|                         | MSPSS<br>(Multidimensional Scale of Social<br>Support Parent Stress<br>Inventory) <sup>b,41–45</sup><br>Assesses social support.   | 12 items Parent report  | Adult  | 2 to 5 min   | Good test and retest coefficients  | Cross-cultural studies done   | Freely<br>accessible   |
|                         | Parent Screening<br>Questionnaire <sup>46,47</sup><br>Screens adults for injury,<br>tobacco, depression, intimate<br>partner violence.   | 20 items Self-administered (parent)   | Parents  | 2 min  | Low sensitivity (20%) for the intimate partner violence Specificity: 92% PPV: 41% NPV: 88%   | Reading level:<br>fourth grade  | Free with<br>permission<br>(Contact Howard<br>Dubowitz, MD,<br>MS, at<br>hdubowitz@<br>peds.umaryland.edu) |
|                         | PSI (Parent Stress Index),<br>Third Edition <sup>48-50</sup> Elicits indicators of stress and<br>identifies parent-child problem<br>areas in parents of children<br>1 mo through 12 y. | 120 items plus 19 optional items<br>Parent self-report<br>(PSI-Short Form has 36 items.)<br>Version for parenting adolescents | Parents of<br>children 1<br>mo through<br>12 y | 20 to 30 min   | Distinguishes among difficult child, parent factors, and parent-child relationships factors  Good internal consistency reliabilities measured by Cronbach alpha    | Transcultural research has involved many populations (eg, Hispanics, Chinese, Portuguese, French, Canadian, Italian, Korean). | Proprietary<br>(\$170/kit)   |

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| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items<br>and Format   | Age Group   | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties  | Cultural<br>Consideration <sup>a</sup> | Cost and<br>Developer  |
|-------------------------|--|---|---|--|---|--|--|
|                         | SIPA (Stress Index for Parents of Adolescents) <sup>51</sup> Elicits indicators of stress in parents of adolescents.   | 112 items   | Parents of<br>adolescents<br>11 to 19 y           | 20 min<br>Scoring: 10 min  | Internal consistency for subscales exceed 0.80. 4-week test-retest coefficients range from 0.74 to 0.91.  | Not described                          | Proprietary<br>(\$130/kit)   |
| Trauma/Exposure         | PDS (Post-traumatic stress<br>diagnostic scale) <sup>52,53</sup> Assesses impact of traumatic<br>event.  | 49 items Paper/pencil or computer   | 18 to 65 y  | 10 to 15 min   | High internal consistency   | Reading level:<br>eighth grade         | Proprietary<br>(\$64/kit)  |
|                         | UCLA-PTSRI (Post-Traumatic<br>Stress Reaction Index) <sup>54-56</sup> Assesses exposure to<br>traumatic experiences and<br>impact of traumatic events.                           | Child: 20 items Parent: 21 items Youth: 22 items  Adapted version available in AAP Feelings Need Check Ups Too CD-ROM <sup>57</sup> to assess trauma exposure | Child and<br>parent: 7 to<br>12 y<br>Youth: 13+ y | 20 to 30 min to administer<br>Scoring: 5 to 10 min                                   | Good test-retest with a coefficient of 0.84. A cutoff of 38 provides 0.93 sensitivity and 0.87 specificity.   | English,<br>Spanish                    | Available to<br>International<br>Society for<br>Traumatic Stress<br>Studies (ISTSS)<br>members |
|                         | TSCC (Trauma Symptom<br>Checklist for Children) <sup>58,59</sup><br>Elicits trauma-related symptoms.   | TSCC-A is a 44-item alternative version that does not contain sexual concernitems.  | 8 to 16 y   | 15 to 20 min   | Hight internal consistency for 5 of 6 clinical scales (0.82 to 0.89)  | English,<br>Spanish                    | Proprietary<br>(\$158/kit)   |
|                         |  | TSCYC is a 90-item caregiver-report instrument for young children   | 3 to 12 y   |  |   |  |  |
| Assessing Child         | and Adolescent Functioning (A  | Algorithm Steps A2a, A12a, B5a, B1  | 2)  |  |   |  |  |
| Global<br>Functioning   | BIS (Brief Impairment Scale) (Multi-dimensional) <sup>6,60</sup> Assesses global functioning in domains of interpersonal relations, school/work, and self-care/self-fulfillment. | 23 items<br>Parent report   | 4 to 17 y   | 10 min   | Internal consistency (0.81 to 0.88 and 0.56 to 0.81) on the 3 subscales. Test-retreat reliability for individual items ranged from fair to substantial in all but 6 items. The BIS has high convergent and concurrent validity. ROC suggest possible thresholds for different uses. | English,<br>Spanish                    | Freely<br>accessible   |

| _                       | 7   |   |  | Administration and Scoring Time   |   |   |                       |
|-------------------------|---|---|--|---|---|---|-----------------------|
| Psychosocial<br>Measure | Tools and<br>Description  | Number of Items<br>and Format                                     | Age Group                                      | Training (none, unless otherwise indicated)   | Psychometric<br>Properties  | Cultural<br>Consideration <sup>a</sup>                  | Cost and<br>Developer |
|                         | CIS (Columbia Impairment Scale) —part of CAWA/Adolescent Wellness Assessment) <sup>61,62</sup> Assesses global functioning in domains of interpersonal relations, psychopathology, school performance, use of leisure time; monitors progress after 6 mo of treatment.  | 13 items  | Children and adolescents                       | 5 min   | Reliable and valid. Evaluates global impairment along 4 areas of dysfunction after 6 mo of treatment. | Data mainly on<br>Caucasian and<br>Hispanic<br>children | Freely<br>accessible  |
|                         | CGSQ (Caregiver Strain<br>Questionnaire)—part of the<br>CAWA <sup>63,64</sup><br>Assesses strain among parents.   | 21 items  | Children and adolescents                       | 5 to 10 min   | Administered after 6 mo of treatment  | Data mainly in<br>Caucasian and<br>Hispanic<br>chldren  | Freely<br>accessible  |
|                         | C-GAS (Children's Global<br>Assessment Scale) <sup>65,66</sup> Assesses overall severity of<br>disturbance and impact on<br>global functioning.   | 1 item  Rated by clinician  100-point scale with 10-point anchors | 4 to 16 y                                      | Requires no administration<br>time because it is based on<br>prior clinical assessment.<br>Time to integrate knowledge<br>of the child into a single score<br>is estimated to be 5 to 10 min. | Demonstrates discriminant and concurrent validity.  | Not described   | Freely<br>accessible  |
|                         | SDQ Impact Scale <sup>b,16</sup> Assesses global functioning in domains of home life, friendships, learning, play.  | 5 items  Parent Teacher Youth ≥11 y                               | 3 to 17 y                                      | <5 min  | See earlier entry on SDQ; limited data on impact scale alone.   | >40 languages   | Freely<br>accessible  |
| Assessing Emer          | gencies (Algorithm Steps A8a,   | A4b)  | <i>(</i> ,                                     |   |   |   | ,                     |
| Suicide<br>Assessment   | Adapted-SAD PERSONS <sup>67</sup> Sex, Age, Depression or affective disorder, Previous attempt, Ethanol-drug abuse, Rational thinking loss, Social supports lacking, Organized plan, Negligent parenting, significant family stressors, suicidal modeling by parents or siblings, School problems  Assesses risk for suicide. | 10-item assessment scale  | Elementary<br>and middle<br>school<br>students | Part of interview process   | Not described   | Not described   | Freely<br>accessible  |

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| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items<br>and Format   | Age Group               | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated)  | Psychometric<br>Properties   | Cultural<br>Consideration <sup>a</sup>  | Cost and<br>Developer  |
|-------------------------|--|---|-------------------------|---|--|---|--|
|                         | CSPI-2 (Childhood Severity of Psychiatric Illness) <sup>68</sup> Assesses severity by eliciting risk factors, behavioral/emotional symptoms, functioning problems, involvement with juvenile justice and child protection, and caregiver needs and strengths.  | 34 items Individual report  | 3 to 21 y               | 3 to 5 min after a routine crisis assessment  25 to 30 min to complete if nothing is known of the child/family  Training is gernerally recommended and demonstration of reliability (ie, certification) before use (by office staff in particular). There are a large number of trainers available and some Web-based training options. | High training and field reliability. Substantial evidence of concurrent and predictive validity.   | Available in<br>Spanish   | Freely<br>accessible<br>Available at www.<br>praedfoundation.<br>org |
|                         | PHQ-9 severity items on suicide  | See Modified PHQ-9 later in table.  |                         |   |  |   |  |
| Primary Care M          | ental Health Assessment (Algor   | rithm Steps B5a, B12)   | w.                      |   |  |   |  |
| Behavioral<br>Checklist | Child Behavior Checklist (CBCL) <sup>69-71</sup> DSM-oriented scales assess for  (1.5 to 5 y) Pervasive developmental problems  (6 to 18 y) Somatic problems Conduct problems (Both groups) Affective problems Anxiety problems Oppositional-defiant problems Attention-deficit/hyperactivity problems | Parent or caregiver/teacher for 1.5 to 5 y: 99 items  Parent/teacher: 118 items  Direct observation | 1.5 to 5 y<br>6 to 18 y | 15 to 20 min (both age groups)  | Test-retest: 0.95 to 1.00 Inter-rater reliability: 0.93 to 0.96 Internal consistency: 0.78 to 0.97 Criterion validity was assessed and found to be acceptable. | Spanish can be ordered but tool has been translated in 74 languages; Norms: African-American, Caucasian, Hispanic/Latino, other | Proprietary<br>(\$150 to<br>\$325/kit)                               |

| Psychosocial<br>Measure | Tools and<br>Description  | Number of Items<br>and Format   | Age Group   | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties   | Cultural<br>Consideration                        | Cost and<br>Developer                  |
|-------------------------|---|---|---|--|--|--|--|
| Rating Scales           | Vanderbilt Diagnostic Rating Scales <sup>72</sup> Elicits symptoms in domains of inattention, disruptive behavior, anxiety, and depression; separate scale assesses functioning in the area of school performance.  | Parent: 55 items  Teacher: 43 itmes  Parent/teacher follow-up: 26 items plus items on medication side effects | 6 to 12 y   | 10 min   | Internal consistency and factor structure are acceptable and consistent with DSM-IV and other accepted measures of ADHD. Rates inattention, impulsivity/ hyperactivity, ODD, CD, depression/ anxiety, and performance.  The performance section of the teacher version has high correlation with the performances questions of the SDQ (0.97). The performance section of the parent version does not have data about its concurrent validity at the current time, so that it is best used as a questionnaire to provide information about performance to be clarified in the interview the clinician has with the family. | English,<br>Spanish                              | Freely<br>accessible                   |
|                         | Conners Rating Scales 73,74  Elicits symptoms in domains of oppositionality, cognitive problems/inattention, hyperactivity, anxiety-shyness, perfectionism, social problems, psychosomatic problems.  | Parent: 80 items Teacher: 59 items Self: 87 items   | 3 to 17 y for<br>parent/teacher<br>12 to 17 y<br>for self | 20 min   | 6 distinct scales Age and gender norms based on more than 11,000 ratings.  | English,<br>Spanish                              | Proprietary<br>(\$190 to<br>\$276/kit) |
|                         | SNAP-IV-C <sup>75-77</sup> SNAP-IV Rating Scale is a revision of the Swanson, Nolan, and Pelham (SNAP) Questionnaire (Swanson et al, 1983); derived from the Conners index.  Elicits symptoms of ADHD and other DSM-IV disorders that may overlap with or masquerade as ADHD. | 90 items Parent Teacher   | 6 to 18 y   | 10 min   | Coefficient alpha for overall parent ratings is 0.94. Internal consistency, item selection, and factor structure were found acceptable and consistent with the constructs in DSM-IV.   | A number of<br>languages:<br>English,<br>Chinese | Freely<br>accessible                   |

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|-------------------------|--|--|--|--|---|---|--|
|                         | SWAN (Strengths and Weaknesses of ADHD Symptoms and Normal Behavior Scale) <sup>78–80</sup> Elicits strengths and weaknesses in domains of attention, impulsivity/hyperactivity. Strength-based rating scales have the potential to evaluate the normal distribution of behaviors and to provide reliable cutoff defining abnormal behavior. Evaluates attention across a continuum. | 18-item version and 30-item version  | 6 to 18 y  | 10 min   | The information gathered with the SWAN-French is compatible with that obtained using the DISC-4.0 and Conners Rating Scale.   | Available in<br>French  | Freely<br>accessible                   |
|                         | BASC (Behavior Assessment<br>System for Children) <sup>81-83</sup><br>Assesses adaptive and problem<br>behaviors.  | Parent version: 134 to 160 items<br>Teacher version: 100 to 139 items<br>Youth version | 2 to 21 y  | Parent version: 10 to 20 min<br>Teacher version: 10 to 20 min<br>Youth version: 30 min<br>Electronic scoring available<br>Must be administered by<br>qualified personnel | Acceptable to strong reliability and validity   | English,<br>Spanish   | Proprietary<br>(\$128 to<br>\$795/kit) |
|                         | ADHD Rating Scale-IV <sup>84,85</sup> Rates symptoms in domains of attention, impulsivity/hyperactivity.   | Parent, teacher 18 items   | 5 to 17 y  | 10 to 20 min   | Internal consistency (coefficient alphas) for inattention and hyperactivity-impulsivity factors greater than 0.90, test-retest reliability greater than 0.80 for both factors, and significant correlations with concurrent direct observations and with other behavior rating scales | English,<br>Spanish   | Proprietary (\$46)                     |
|                         | MOAS (Modified Overt<br>Aggression Scale) <sup>86,87</sup><br>Rates symptoms in domain<br>of disruptive behavior/aggression.   | 4 items<br>Physician rating of agression   | Adults but<br>has been<br>used in<br>adolescents | Administered as a semi-structured interview asking adolescent to report on aggressive behavior.  10 to 15 min  | Internal consistency 0.84:<br>strong correlation with anger and<br>hostility measures   | Shown to have<br>discriminant<br>validity when<br>used in Nigeria <sup>88</sup> | Freely<br>accessible                   |

| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items and Format         | Age Group  | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated)           | Psychometric<br>Properties  | Cultural<br>Consideration <sup>a</sup>  | Cost and<br>Developer   |
|-------------------------|--|------------------------------------|------------|--|---|---|---|
|                         | Conduct Disorder Scale <sup>89</sup> Rates symptoms in domain of disruptive behavior.  | 40 items  Parent Teachers Siblings | 5 to 22 y  | 5 to 10 min  | The test was standardized on 1,040 persons representing the following diagnostic groups: normal, gifted and talented, mentally retarded, ADHD, emotionally disturbed, learning disabled, physically handicapped, and persons with conduct disorder. Norms were developed based on 644 representative individuals with a conduct disorder. | Not described   | Proprietary<br>(\$100/kit)  |
|                         | Modified PHQ-9  Screens for symptoms in domains of depression and suicidality.   | 9 plus severity items              | Adolescent | 5 min<br>Scoring: 1 min  | Modified version never validated in a research setting; overall 88% sensitivity and 88% specificity   | English,<br>Spanish   | Free with permission  Available in the toolkit at www.gladpc.org. |
|                         | KADS (Kutcher Adolescent<br>Depression Scale) <sup>90–92</sup><br>Screens for depression.  | 6, 11, or 16 items                 | 12 to 17 y | 5 min<br>Scoring: 1 min  | Sensitivity: 92%<br>Specificity: 71%  | Not described   | Free with permission  Available at www.teenmental health.org      |
|                         | CES-D (Center for<br>Epidemiological Studies—<br>Depression Scale)—modified<br>version for children and<br>adolescents <sup>93–98</sup><br>Screens for depression,<br>emotional turmoil. | 20 items                           | 6 to 17 y  | 5 to 10 min  Scores above 15 can be indicative of significant levels of depressive symptoms.88 | Used in adult populations. Modified version for children and adolescents may not discriminate well between depressed and nondepressed adolescents.  Sensitivity: 71% Specificity: 57%   | Mexican<br>adolescents,<br>French<br>English,<br>Spanish<br>Reading level:<br>sixth grade | Freely<br>accessible  |

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| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items<br>and Format   | Age Group  | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties   | Cultural<br>Consideration <sup>a</sup>               | Cost and<br>Developer   |
|-------------------------|--|---|------------|--|--|--|---|
|                         | DISC (Columbia Diagnostic<br>Interview Schedule for Children<br>Diagnostic Predictive Scales) <sup>99,100</sup> Computerized structure interview<br>(yes/no) elicits symptoms of 36<br>mental health disorders, applying<br>DSM-IV criteria. | 22 items (Last item is not scored.) Youth self-administered 8-item abbreviated version available through TeenScreen | 9 to 17 y  | Depends on items endorsed Training needed  | Sensitivities and specificities ranged from 80% to 100% for nearly all diagnostic scales. Positive predictive value was generally high (0.4–0.7). Testretest reliabilities are good and had intraclass correlation coefficients ranging from 0.52 to 0.82. | Not described  | Free with<br>permission<br>Contact www.<br>TeenScreen.org<br>for a copy of the<br>8-item version.                     |
|                         | CDI (Child Depression<br>Inventory) <sup>101</sup> Screens for depression.   | Parent: 17 items Teacher: 12 items Youth: 27 items (Y Short-Form: 10 items)   | 7 to 17 y  | 5 to 10 min (27-item)  | Internal consistency coefficients range from 0.71 to 0.89 and the test-retest coefficients range from 0.74 to 0.83.  | English,<br>Spanish<br>Reading level:<br>first grade | Proprietary<br>(\$450 for 3<br>years)   |
|                         | SMFQ (Short Mood and Feelings<br>Questionnaire) <sup>102,103</sup><br>Screens for depression.  | 13 items  Self-report (child and parent)  | 8 to 16 y  | <5 min   | For combined parent and child reports Sensitivity: 70% Specificity: 85%  | Not described  | Free with<br>permission.<br>Permission<br>information<br>available at http<br>//devepi.duhs.<br>duke.edu/mfq.<br>html |
|                         | PHQ-A (Patient Health<br>Questionnaire for Adolescents) <sup>104</sup><br>Screens for anxiety, eating<br>problems, mood problems, and<br>substance abuse.  | 83 items Self-report (adolescents)  | 13 to 18 y | Scoring: <5 min  | Sensitivity: 75% Specificity: 92% Accuracy: 89% Diagnostic agreement: 0.65  Properties considered acceptable by US Preventive Services Task Force to screen adolescents for depression. <sup>105</sup>   | Not described  | Freely<br>accessible  |
|                         | PHQ-A Depression Screen  Screens for depression.   | Abbreviated 9-item screen specifically for depression   | 12 to 18 y | <5 min to complete and score   | Not described  | Not described  | Free with permission  |
|                         | BDI (Beck Depression<br>Inventory) <sup>106</sup> Assesses for depression.   | 21 items Self-administered or verbally administered by a trained administrator                                      | 14+ y      | 5 to 10 min Training required  | Sensitivity: 84%<br>Specificity: 81%   | English,<br>Spanish<br>Reading level:<br>sixth grade | Proprietary<br>(\$109 for<br>complete kit)  |

| Psychosocial<br>Measure | Tools and<br>Description  | Number of Items<br>and Format  | Age Group  | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated) | Psychometric<br>Properties   | Cultural<br>Consideration <sup>a</sup>    | Cost and<br>Developer   |
|-------------------------|---|--|--|--|--|---|---|
|                         | BDI-FS (Becks Depression<br>Inventory—FastScreen) <sup>107</sup><br>Screens for depression.   | 7 items  | 13+ y  | <5 min   | Sensitivity: 91% Specificity: 91% Properties considered acceptable by US Preventive Services Task Force to screen adolescents for depression. <sup>105</sup>   | Not described                             | Propriety.<br>(\$105 for<br>introductory kit)   |
|                         | Spence Children's Anxiety Scale <sup>108,109</sup> Assesses for anxiety. Subscales include panic/agoraphobia, social anxiety, separation anxiety, generalized anxiety, obsessions/compulsions, and fear of physical injury. | Parent: 35 to 45<br>Student: 34 to 45  | Parent: 2.5<br>to 6.5 y<br>Student: 8 to<br>12 y | 5 to 10 min  | Coefficient alpha: 0.9 to 0.92<br>Test-retest: 0.60 to 0.63<br>Normative data: Available for<br>males/females 8 to 19 y from<br>various countries (no US data<br>available)  | Available in a<br>variety of<br>languages | Freely<br>accessible  |
|                         | SCARED (Self-Report for<br>Childhood Anxiety Related<br>Emotional Disorders) <sup>110,111</sup> Assesses for anxiety—but not<br>specifically OCD or PTSD.   | 41 items<br>Parent<br>Youth  | 8+ y   | 5 min<br>Scoring: 1 to 2 min   | Coefficient alpha: 0.9   | English                                   | Freely<br>accessible  |
|                         | CRIES (Children's Revised Impact of Event Scale) <sup>112,113</sup> Assesses impact of traumatic events.  | 13 items total 4 items measuring intrusion 4 items measuring avoidance 5 items measuring arousal Self-report | 8 y and older<br>who can read                    |  | Cronbach alphas were as follows: Intrusion: 0.70 Avoidance: 073 Arousal: 0.60 Total: 0.80  No validation studies against independent clinical diagnosis have been conducted. As a screening, it is recommended that the results from the Intrusion and Avoidance scales only be used. A sum of the scores on these 2 scales of 17 or more indicates a high probability that the child will obtain a diagnosis of PTSD. | Available in<br>several<br>languages      | Freely<br>accessible.<br>Instructions and<br>forms available<br>at childrenand<br>war.org |

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| Psychosocial<br>Measure | Tools and<br>Description  | Number of Items<br>and Format   | Age Group  | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated)  | Psychometric<br>Properties  | Cultural<br>Consideration <sup>a</sup> | Cost and<br>Developer   |
|-------------------------|---|---|--|---|---|--|---|
|                         | BRIEF (Behavior Rating Inventory of Executive Function) <sup>114</sup> Assesses executive functioning in the home and school environments. Contributes to evaluation of learning disabilities, ADHD, traumatic brain injury, low birth weight, Tourette disorder, and pervasive developmental disorders/autism. | 86 items  Parent Teacher  | 5 to 18 y  | 10 to 15 min<br>Scoring: 15 to 20 min   | High internal consistency (alphas: 0.80 to 0.98); test-retest reliability (Spearman's rho: 0.82 for parents and 0.88 for teachers); and moderate correlations between teacher and parent ratings (Spearman's rho: 0.32 to 0.34) | Not described                          | Proprietary<br>(\$250/kit)  |
|                         | BITSEA (Brief Infant Toddler<br>Social Emotional<br>Assessment) <sup>115,116</sup><br>Screens for social-emotional<br>problems in young children.   | 42 items  Parent report Child care report   | 12 to 36 mo  | 7 to 10 min   | Nationally standardized on 100 children. Excellent test-retest reliability. Detected 85% to 90% CBCL.   | English,<br>Spanish                    | Proprietary<br>(\$105/kit)  |
| Diagnostic Tests        | CHADIS-DSM <sup>117</sup> Assesses broadly for mental health symptoms and problems in functioning.  | Electronic  Variable number of items depending on response—46 entry followed by algorithm   | Birth on by parent   | 18 to 48 min  | DSM-PC based  | English, some<br>Spanish               | Proprietary<br>(Cost not<br>available)  |
|                         | DISC-IV (Diagnostic Interview<br>Schedule for Children)99,118  Assesses for more than 30<br>diagnoses using DSM-IV,<br>DSM-III-R, and ICD-10 criteria.  | The DISC employs a branching-tree question structure. Altogether, the DISC-Y contains 2,930 questions (the DISC-P contains a few more). | 2 versions:<br>DISC-P (for<br>parents of<br>children aged<br>6 to 17 y) and<br>the DISC-Y<br>(for direct<br>administration<br>to children<br>aged 9 to 17 y) | Administration time largely depends on how many symptoms are endorsed.  The DISC is scored using a computer algorithm, programmed in SAS.  Algorithms have been prepared to score the parent and the youth versions of the DISC according to the symptom criteria listed in the DSM-IV diagnostic system. | Test-retest agreement with<br>DSM-IV Major Depression<br>criterion A was good (k: 0.79 for<br>parents, k: 0.67 for youths).   |  | There is a charge for the paper version of the NIMH-DISC-IV that covers copying and mailing expenses. |

| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items<br>and Format  | Age Group  | Administration and<br>Scoring Time<br>Training (none, unless<br>otherwise indicated)   | Psychometric<br>Properties  | Cultural<br>Consideration <sup>a</sup>  | Cost and<br>Developer  |
|-------------------------|--|--|------------|--|---|---|--|
| Collateral Inform       | nation Tools (Algorithm Steps A  | 112a, B2b, B9)   |            |  |   |   |  |
| Rating Scales           | Vanderbilt <sup>72</sup> Conners <sup>73,74</sup> SNAP-IV-C <sup>75-77</sup> SWAN <sup>78-80</sup> BASC <sup>81-83</sup>   | See previous entry in table. |            |  |   |   |  |
|                         | ADHD Rating Scale-IV <sup>84,85</sup> Conduct Disorder Scale <sup>89</sup> Rates disruptive behaviors.   | See previous entry in table. See previous entry in table.  |            |  |   |   |  |
|                         | Disruptive Behavior Rating Scale <sup>119</sup> Rates symptoms in domains of oppositional/defiant behaviors, inattention, impulsivity/ overactivity.   | 45 items<br>Parent/teacher   | 5 to 10 y  | 5 to 10 min  | Test-retest: 0.68 to 0.92 Inter-rater reliability: not assessed Internal consistency: 0.72 to 0.95 Criterion validity was assessed and found to be acceptable.  | Limited,<br>Caucasian,<br>other—sample<br>from central<br>Virginia                                    | Freely<br>accessible   |
|                         | ABLE (Attention, Behavior, Language, and Emotions) <sup>120,121</sup> Screens for symptoms in domains of attention, behavior, language problems, and emotional problems.  A 2-tiered rating system. Level I screens for commonly reported concerns in preschool settings and aids in determining severity. Level II provides more specific information if the Level I concerns are severe. | Parent/teacher/caregiver  Level I: 17 items (10 problem focused, 7 severity focused)  Level II: 40 items   | 2.5 to 8 y | Level I Admin time: <5 min Scoring time: <1 min Level II Admin time: 10 to 15 min Scoring time: 5 min Web-based administration and computer scoring are available. | Strong evidence to support Level I and Level II reliability and validity. Estimates of internal consistency are above 0.70. Scales correlated with previously validated scales (eg, CBCL, the Behavior Problem Index, the Hightower Competence Scales). | Does not<br>overselect<br>African<br>Americans<br>and Latino<br>children.<br>Available in<br>Spanish. | Proprietary<br>(\$90 for<br>manual, Level<br>forms, and<br>Level II forms) |

| Psychosocial<br>Measure | Tools and<br>Description   | Number of Items and Format   | Age Group   | Scoring Time<br>Training (none, unless<br>otherwise indicated)  | Psychometric<br>Properties  | Cultural<br>Consideration   | Cost and<br>Developer   |
|-------------------------|--|--|-------------|---|---|---|---|
|                         | Early Childhood Screening<br>Assessment <sup>122</sup> Assesses emotional and<br>behavioral development in young<br>children and maternal distress.                                    | 40 items, 3-point Likert scale responses, and an additional option for parents to identify whether they are concerned and would like help with an item | 18 to 60 mo | 10 to 15 min to complete.  Scoring time: 1 to 2 min  Should be administered by health professional or mental health professional whose training and scope of practice include interpreting screening tests and interpreting positive or negative screens for parents. | Sensitivity: 86%<br>Specificity: 83%  | English,<br>Spanish,<br>Romanian<br>Reading level:<br>fifth grade | Freely<br>accessible  |
|                         | BITSEA <sup>115,116</sup>  | See previous entry in table.   |             |   |   |   |   |
|                         | C-TRF (Caregiver-Teacher Report Form) <sup>123</sup> Assesses for emotionally reactive, anxious/depressed, somatic complaints, withdrawn, attention problems, and aggressive behavior. | 99 items Child care providers Teachers   | 1.5 to 5 y  | Hand and computer scoring   | Normed on 1,192 children.<br>Consistent with <i>DSM</i> diagnostic<br>catagories. | English   | Proprietary<br>(\$160/kit for<br>hand scoring;<br>\$255/kit for<br>computer<br>scoring) |

AAP, American Academy of Pediatrics; MCHB, Maternal and Child Health Bureau; NA, not applicable; PPV, positive predictive value; NPV, negative predictive value; ROC, receiver operator curve; DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; ADHD, attention-deficit/hyperactivity disorder; ODD, oppositional-defian disorder; CD, conduct disorder; OCD, obsessive-compulsive disorder; PTSD, post-traumatic stress disorder; DSM-III-R, Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised; ICD-10, International Classification of Diseases, 10th Edition.

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A good overview of cultural competence in the mental health is provided by Cultural Competency: A Practical Guide for Mental Health Service Providers, published by the Hogg Foundation for Mental Health at the University of Texas (www.hogg.utexas.edu/PDF/Saldana.pdf).

<sup>&</sup>lt;sup>b</sup>Screening tool designed for large-scale screening; easily administered, scored, and interpreted.

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